

Under the paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/574,055
				Filing Date	April 6, 2007
				First Named Inventor	Robert S. Puskas
				Art Unit	2857
				Examiner Name	Unassigned
Sheet	1	Of	8	Attorney Docket Number	31469-708.831

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1.	US 2002/0030812	03/14/2002	Ortyn et al.	
	2.	US 2006/0003333	01/05/2006	Puskas	
	3.	US 2002/0167665	11/14/2002	Yeung et al.	
	4.	US 2003/0029995	02/13/2003	Mullins et al.	
	5.	US 2005/0164205	07/28/2005	Puskas	
	6.	US 2006/0078998	04/13/2006	Puskas	
	7.	US 3,826,364	07/30/1974	Bonner, et al.	
	8.	US 4,071,298	01/31/1978	Falconer	
	9.	US 4,172,227	10/23/1979	Tyrer et al.	
	10.	US 4,243,318	01/06/1981	Stohr	
	11.	US 4,251,733	02/17/1981	Hirleman, Jr.	
	12.	US 4,452,773	06/05/1984	Molday	
	13.	US 4,727,020	02/23/1988	Recktenwald	
	14.	US 4,768,879	09/06/1988	McLachlan et al.	
	15.	US 4,770,183	09/13/1988	Groman, et al.	
	16.	US 4,793,705	12/27/1988	Shera	
	17.	US 4,927,265	05/22/1990	Brownlee	
	18.	US 4,979,824	12/25/1990	Mathies et al.	
	19.	US 5,002,389	03/26/1991	Benser	
	20.	US 5,041,733	08/20/1991	Noguchi et al.	
	21.	US 5,108,179	04/28/1992	Myers	
	22.	US 5,138,170	08/11/1992	Noguchi et al.	
	23.	US 5,209,834	05/11/1993	Shera	
	24.	US 5,269,937	12/14/1993	Dollinger et al.	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.02. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-756-9199) and select option 2.

Under the paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/574,055
				Filing Date	April 6, 2007
				First Named Inventor	Robert S. Puskas
				Art Unit	2857
				Examiner Name	Unassigned
Sheet	2	Of	8	Attorney Docket Number	31469-708.831

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	25.	US 5,385,707	03/31/1995	Miltenyi, et al.	
	26.	US 5,480,614	01/02/1996	Kamahori	
	27.	US 5,528,045	06/18/1996	Hoffman, et al.	
	28.	US 5,540,494	07/30/1996	Purvis Jr. et al.	
	29.	US 5,543,838	08/06/1996	Hosier et al.	
	30.	US 5,571,410	11/05/1996	Swedberg et al.	
	31.	US 5,603,351	02/18/1997	Cherukuri et al.	
	32.	US 5,605,662	02/25/1997	Heller et al.	
	33.	US 5,633,503	05/27/1997	Kosaka	
	34.	US 5,645,702	07/08/1997	Witt et al.	
	35.	US 5,653,859	08/05/1997	Parton et al.	
	36.	US 5,653,939	08/05/1997	Hollis et al.	
	37.	US 5,658,413	08/19/1997	Kaltenbach et al.	
	38.	US 5,681,751	10/28/1997	Begg et al.	
	39.	US 5,682,038	10/28/1997	Hoffman	
	40.	US 5,716,825	02/10/1998	Hancock et al.	
	41.	US 5,746,901	05/05/1998	Balch et al.	
	42.	US 5,755,942	05/26/1998	Zanzucchi et al.	
	43.	US 5,770,029	06/23/1998	Nelson et al.	
	44.	US 5,793,485	08/11/1998	Gourley	
	45.	US 5,795,158	08/18/1998	Warinner	
	46.	US 5,798,222	08/25/1998	Goix	
	47.	US 5,807,677	09/15/1998	Eigen et al.	
	48.	US 5,858,195	01/12/1999	Ramsey	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.95. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/574,055
				Filing Date	April 6, 2007
				First Named Inventor	Robert S. Puskas
				Art Unit	2857
				Examiner Name	Unassigned
Sheet	3	Of	8	Attorney Docket Number	31469-708.831

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	49.	US 5,863,801	01/26/1999	Southgate et al.	
	50.	US 5,949,532	09/07/1999	Schrof et al.	
	51.	US 5,955,028	09/21/1999	Chow	
	52.	US 5,989,402	11/23/1999	Chow et al.	
	53.	US 5,999,250	12/07/1999	Hairston et al.	
	54.	US 6,041,515	03/28/2000	Ally et al.	
	55.	US 6,049,380	04/11/2000	Goodwin et al.	
	56.	US 6,071,478	06/06/2000	Chow	
	57.	US 6,140,048	10/31/2000	Muller et al.	
	58.	US 6,177,277	01/23/2001	Soini	
	59.	US 6,211,955	04/03/2001	Basiji et al.	
	60.	US 6,249,341	06/19/2001	Basiji et al.	
	61.	US 6,280,960	08/28/2001	Carr	
	62.	US 6,309,886	10/30/2001	Ambrose et al.	
	63.	US 6,355,420	03/12/2002	Chan	
	64.	US 6,386,219	05/14/2002	Barth et al.	
	65.	US 6,388,746	05/14/2002	Eriksson et al.	
	66.	US 6,403,947	06/11/2002	Hoyt et al.	
	67.	US 6,473,176	10/29/2002	Basiji et al.	
	68.	US 6,495,104	12/17/2002	Unno et al.	
	69.	US 6,506,609	01/14/2003	Wada et al.	
	70.	US 6,532,067	03/11/2003	Chang et al.	
	71.	US 6,537,437	03/25/2003	Galambos et al.	
	72.	US 6,582,903	06/24/2003	Rigler et al.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.95. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-756-9199) and select option 2.

3319667_1.DOC

Attorney Docket No. 31469-708.831

Under the paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/574,055
				Filing Date	April 6, 2007
				First Named Inventor	Robert S. Puskas
				Art Unit	2857
				Examiner Name	Unassigned
Sheet	4	Of	8	Attorney Docket Number	31469-708.831

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	73.	US 6,599,436	07/29/2003	Matzke et al.	
	74.	US 6,608,680	08/19/2003	Basiji et al.	
	75.	US 6,689,323	02/10/2004	Fisher et al.	
	76.	US 6,783,992	08/31/2004	Robotti et al.	
	77.	US 6,802,342	10/12/2004	Fernandes et al.	
	78.	US 6,811,668	11/02/2004	Berndt et al.	
	79.	US 6,816,257	11/09/2004	Goix	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ² - Number ³ - Kind Code ⁴ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁵
	80.	DE 3720844	01/05/1989	Miltenyi, et al.		
	81.	WO 90/10876 A1	09/20/1990	Adrian, et al.		
	82.	WO 99/55461 A1	11/04/1999	Borrelli, et al.		

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	83.	AMBROSE, et al. Single molecule fluorescence spectroscopy at ambient temperature. Chemical Reviews. 1999; 99(10): 2929-56.	
	84.	ANAZAWA, et al. Electrophoretic quantitation of nucleic acids without amplification by single molecule imaging. Anal. Chem. 2002; 74(19): 5033-38.	
	85.	BECKER, et al. Three-dimensional photogrammetric particle-tracking velocimetry. Preparing for the Future. 1995; 5(3). Available at http://esapub.esrin.esa.it/pfl/pffv5n3/beckv5n3.htm (7 pages).	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. To if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-0199 (1-800-750-0199) and select option 2.

Under the paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/574,055
				Filing Date	April 6, 2007
				First Named Inventor	Robert S. Puskas
				Art Unit	2857
				Examiner Name	Unassigned
Sheet	5	Of	8	Attorney Docket Number	31469-708.831

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T*
	86.	BIESCHKE, et al., Ultrasensitive detection of pathological prion protein aggregates by dual-color scanning for intensely fluorescent targets. <i>Proc Natl Acad Sci USA</i> . 2000; 97(10): 5468-5473.		
	87.	BOUCHON, et al. Cutting edge: inflammatory responses can be triggered by TREM-1, a novel receptor expressed on neutrophils and monocytes. <i>The Journal of Immunology</i> . 2000; 164(10): 4991-1995.		
	88.	BRINKMEIER, et al. Two-beam cross-correlation: a method to characterize transport phenomena in micrometer-sized structures. <i>Anal. Chem.</i> 1999; 71(3): 609-616.		
	89.	CASTRO, et al. Fluorescence detection and size measurement of single DNA molecules. <i>Anal. Chem.</i> 1993; 65(7): 849-852.		
	90.	CASTRO, et al. Single molecule detection: applications to ultrasensitive biochemical analysis. <i>Applied Optics</i> . 1995; 34(18): 3218-3222.		
	91.	CASTRO, et al. Single-molecule detection of specific nucleic acid sequences in unamplified genomic DNA. <i>Anal. Chem.</i> 1997; 69(19): 3915-3920.		
	92.	CASTRO, et al. Single-molecule electrophoresis. <i>Anal. Chem.</i> 1995; 67(18):3181-3186.		
	93.	CASTRO, et al. Ultrasensitive, direct detection of a specific DNA sequence of <i>Bacillus anthracis</i> in solution. <i>The Analyst</i> . 2000; 125: 9-11.		
	94.	CHEN, et al. Single-molecule detection in capillary electrophoresis: molecular shot noise as a fundamental limit to chemical analysis. <i>Anal. Chem.</i> 1996; 68(4): 690-696.		
	95.	COHEN, et al. Rapid separation and purification of oligonucleotides by high-performance capillary gel electrophoresis. <i>Proc Natl Acad Sci USA</i> . 1988; 85(24): 9660-9663.		
	96.	COLONNA, M. TREMS in the immune system and beyond. <i>Nature Reviews: Immunology</i> . 2003; 3(6): 445-453.		
	97.	CSIRO Australia. Image motion, tracking and registration. Available at http://www.cmis.csiro.au/IAP/Motion/		

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-780-9199) and select option 2.

Under the paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/574,055
				Filing Date	April 6, 2007
				First Named Inventor	Robert S. Puskas
				Art Unit	2857
				Examiner Name	Unassigned
Sheet	6	Of	8	Attorney Docket Number	31469-708.831

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ⁶
	98.	DOVICH, et al. Laser-induced fluorescence of flowing samples as an approach to single-molecule detection in liquids. <i>Anal. Chem.</i> 1984; 56(3): 348-354.		
	99.	EFFENHAUSER, et al. Integrated capillary electrophoresis on flexible silicone microdevices: analysis of DNA restriction fragments and detection of single DNA molecules on microchips. <i>Anal. Chem.</i> 1997; 69(17): 3451-3457.		
	100.	ETZIONI, et al. The case for early detection. <i>Nature Reviews: Cancer.</i> 2003; 3(4): 243-252.		
	101.	FISTER, et al. Counting single chromophore molecules for ultrasensitive analysis and separations on microchip devices. <i>Anal. Chem.</i> 1998; 70(3): 431-437.		
	102.	GIBOT, et al. Plasma level of a triggering receptor expressed on myeloid cells-1: its diagnostic accuracy in patients with suspected sepsis. <i>Annals of Internal Medicine.</i> 2004; 141(1): 9-15.		
	103.	GIBOT, et al. Soluble triggering receptor expressed on myeloid cells and the diagnosis of pneumonia. <i>The New England Journal of Medicine.</i> 2004; 350(5): 451-458.		
	104.	Glenn Research Center, NASA. Particle Imaging Velocimetry. Available at http://www.grc.nasa.gov/WWW/Optinstr/piv/background.htm and associated web pages.		
	105.	GOLDE, T. Alzheimer disease therapy: can the amyloid cascade be halted? <i>The Journal of Clinical Investigation.</i> 2003; 11(1): 11-18.		
	106.	GUENARD, et al. Two-channel sequential single-molecule measurement. <i>Anal. Chem.</i> 1997; 69(13): 2426-2433.		
	107.	HAAB, et al. Single molecule fluorescence burst detection of DNA fragments separated by capillary electrophoresis. <i>Anal. Chem.</i> 1995; 67(18): 3253-3260.		
	108.	HAAB, et al. Single-molecule detection of DNA separations in microfabricated capillary electrophoresis chips employing focused molecular streams. <i>Anal. Chem.</i> 1999; 71(22): 5137-5145.		
	109.	HAUGLAND, R. P., <i>Molecular Probes Handbook of Fluorescent Probes and Research Product</i> , Ninth Edition, 2002, Molecular Probes, Inc.		

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-756-9199) and select option 2.

Under the paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/574,055
				Filing Date	April 6, 2007
				First Named Inventor	Robert S. Puskas
				Art Unit	2857
				Examiner Name	Unassigned
Sheet	7	Of	8	Attorney Docket Number	31469-708.831

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	110.	KELLER, et al. Analytical applications of single-molecule detection. Analytical Chemistry. 2002; 74(11): 317A-324A.	
	111.	LECAPTAIN, et al. Two-beam fluorescence cross-correlation spectroscopy in an electrophoretic mobility shift assay. Anal Chem. 2002; 74(5): 1171-1176.	
	112.	LI, et al. Ultrasensitive coincidence fluorescence detection of single DNA molecules. Anal Chem. 2003; 75(7): 1664-1670.	
	113.	LOSCHER, et al. Counting of single protein molecules at interfaces and application of this technique in early-stage diagnosis. Anal Chem. 1998; 70(15): 3202-5.	
	114.	LUCEY, et al. Type 1 and type 2 cytokine dysregulation in human infectious, neoplastic, and inflammatory diseases. Clinical Biology Reviews. 1996; 9(4): 532-562.	
	115.	MA, et al. High-Throughput Single-Molecule Spectroscopy in Free Solution. Anal. Chem. 2000; 72: 4640-4645.	
	116.	MA, et al. Single-molecule immunoassay and DNA diagnosis. Electrophoresis. 2001; 22(3): 421-426.	
	117.	NGUYEN, et al. Detection of single molecules of phycoerythrin in hydrodynamically focused flows by laser-induced fluorescence. Anal Chem. 1987; 59(17): 2158-2161.	
	118.	PECK, et al. Single-molecule fluorescence detection: autocorrelation criterion and experimental realization with phycoerythrin. Proc Natl Acad Sci USA. 1989; 86(11): 4087-4091.	
	119.	SAUER, et al. Detection and identification of individual antigen molecules in human serum with pulsed semiconductor lasers. Appl. Phys. B. 1997; 65: 427-431.	
	120.	SHERA, et al. Detection of single fluorescent molecules. Chemical Physics Letters. 1990; 174(6): 553-557.	
	121.	SHORTREED, et al. High-throughput single-molecule DNA screening based on electrophoresis. Anal Chem. 2000; 72(13): 2879-2885.	
	122.	SIDRANSKY, D. Emerging molecular markers of cancer. Nature Reviews: Cancer. 2002; 2(3): 210-219.	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/574,055
				Filing Date	April 6, 2007
				First Named Inventor	Robert S. Puskas
				Art Unit	2857
				Examiner Name	Unassigned
Sheet	8	Of	8	Attorney Docket Number	31469-708.831

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	123.	SOPER, et al. Photon burst detection of single near-infrared fluorescent molecules. Anal Chem. 1993; 65(6): 740-747.	
	124.	SOPER, et al. Single-molecule detection in the near-IR using continuous wave diode laser excitation with an avalanche photon detector. Applied Spectroscopy. 1998; 52(1): 1-6.	
	125.	UPATNIEKS, et al. A kilohertz frame rate cinemagraphic PIV system for laboratory-scale turbulent and unsteady flows. Experiments in Fluids. 2002; 32: 87-98.	
	126.	VAN ORDEN, et al. Single-molecule identification in flowing sample streams by fluorescence burst size and intraburst fluorescence decay rate. Anal Chem. 1998; 70(7): 1444-1451.	
	127.	WABUYELE, et al. Single molecule detection of double-stranded DNA in poly(methylmethacrylate) and polycarbonate microfluidic devices. Electrophoresis, October 2001; 22(18): 3939-3948.	
	128.	WILLNEFF, J. A spatio-temporal matching algorithm for 3D particle tracking velocimetry: a dissertation submitted to the Swiss Federal Institute of Technology Zurich for the degree of Doctoral of Technical Sciences (abstract). September 2003. Diss. ETH No. 15276. Available at http://e-collection.ethbib.ethz.ch/ecol-pool/diss/abstracts/p15276.pdf .	
	129.	YEUNG. High-Throughput Single Molecule Screening of DNA and Proteins. Chem Rec. 2001; 1:123-129.	
	130.	ZHU, et al. Fluorescence multiplexing with time-resolved and spectral discrimination using a near-IR detector. Anal Chem. 2003; 75(10): 2280-2291.	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-756-9199) and select option 2.